DOCUMENT RESUME

ED 220 409 SP 020 475

TITLE	Mathematics. Correlation of Program of Studies and Adopted Textbooks. MET, A Title IV-C Project.
INSTITUTION	Fairfax County Public Schools, VA. Dept. of Instructional Services.
SPONS AGENCY	Virginia State Dept. of Education, Richmond. Office of Pilot Studies and Title IV-C Project.
PUB DATE	82
NOTE	90p.; For related documents, see SP 020 474-491.
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	Classroom Techniques; County School Districts; *Curriculum Guides; Elementary Education; *Elementary School Mathematics; Inservice Teacher Education; *Instructional Materials; *Mathematics Curriculum; Mathematics Materials; Pilot Projects; *Resource Units; Textbooks
IDENTIFIERS	*Project MET

ABSTRACT

This booklet is part of the Management for Effective Teaching (MET) support kit, a pilot project designed by the Fairfax County (Virginia) Public Schools to assist elementary school teachers in planning, managing, and implementing the county's Program of Studies (POS). This document provides charts to guide pilot project teachers in selecting appropriate mathematics lesson materials from specified textbooks and supplementary materials. Charts for each grade level specify: (1) POS mathematics objectives in terms of knowledge, skills, beliefs and values, and participation; (2) chapter and page references in the textbooks' teacher's editions; and (3) suggested ideas and materials. Textbook correlations are for "Mathematics Their Way" and "On the Road to Understanding Mathematics" at the kindergarten level and for "HBJ Mathematics," "McGraw Hill Mathematics," and "Real Math" for the first through sixth grades. (FG)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED220409

MATHEMATICS

Correlation of Program of Studies and Adopted Textbooks

MEET A TITLE IV C PROJECT

FAIRFAX COUNTY PUBLIC SCHOOLS

Department of Instruction, Office of Educational Accountability

1982

SP 020 475

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☑ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

MET

Management for Effective Teaching

We are happy to present the Project MET materials to you. As you know, these materials are copies of the original contents of the Management Support Kit. They are designed to assist teachers, streamline organization, and support current management efforts.

We hope that you find them useful. Should additional assistance be required, please feel free to contact us at Masonville.

Project MET Staff
Pat Harbour, Director

Office of Elementary Education
Department of Instructional Services
Fairfax County Public Schools • Fairfax, Virginia

Management for Effective Teaching

MET

MANAGEMENT SUPPORT KIT

Introduction

Project MET, Management for Effective Teaching, is a federally funded developmental project which will be piloted, with materials field-tested, in Fairfax County Public Schools, during the school year 1982-83. Materials and procedures have been developed to assist with the management of planning, teaching, and record keeping. MET products contained in the Management Support Kit are designed to aid teachers in the effective utilization of time, space, and materials in organizing and planning for instruction. Approximately 400 elementary teachers throughout the school system will use the products from the kit.

The teacher is a manager who plans, coordinates, and directs the classroom, an organizational unit of the school, and thus:

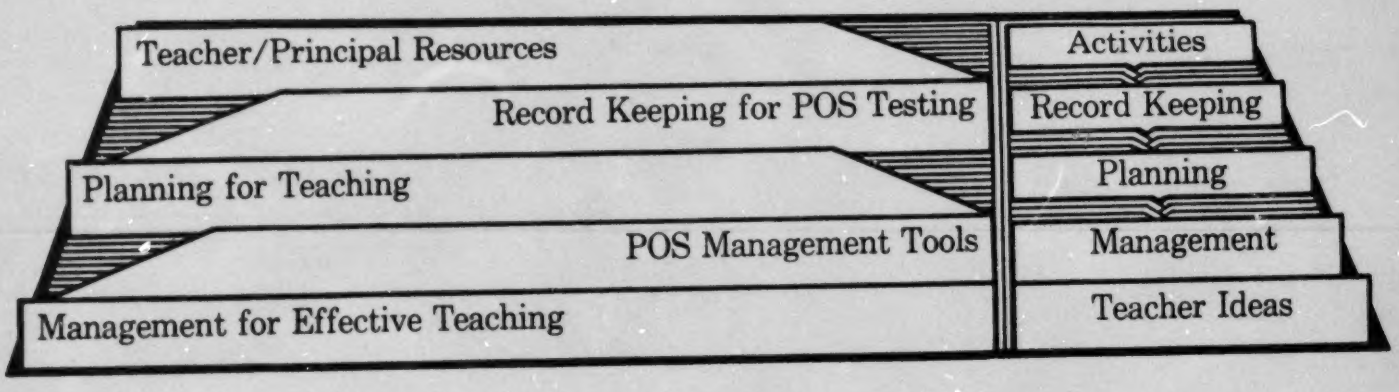
- sets goals and objectives
- ensures that appropriate knowledge and skill mastery levels are attained among students
- creates an environment conducive to the development of positive attitudes toward self and others
- teaches and reinforces positive individual and group behavior
- motivates students to achieve individual and group goals (cognitive, physical, and socio-emotional)
- manages the instructional materials, classroom space, and human resources for a quality learning environment

Research suggests that effective managment in teaching enhances the instructional program and ultimately may improve student achievement. The purpose of Project MET is to provide an opportunity for teachers to determine the extent to which this is true. Teachers will field-test the procedures, process models, and materials contained in the Management Support Kit.

During the 1982-83 school year, teachers will be asked to respond to a survey that assesses the contents of the kit. The survey will allow teachers to determine the utility and validity of the products. The participation and cooperation of each teacher using the kit and responding to the survey will be important to instructional management in Fairfax County Public Schools. Since the project is a pilot program, the results reported by teachers who have used the MET materials may have implications for instructional management throughout the state of Virginia. The time and energy of each participant will be greatly valued and appreciated.

MET

Management for Effective Teaching (MET) is a pilot project funded under Title IV-C of the Elementary and Secondary Education Act. The project was planned and implemented to answer the need expressed by teachers, principals and other educational personnel for resources to manage more effectively the Fairfax County Public Schools' Program of Studies.



What MET Is...

It is a management support kit of resources, materials and information designed to assist classroom teachers (K-6) in planning, managing and implementing the Fairfax County Public Schools' Program of Studies.

Approximately four hundred Fairfax County Public School teachers will field test and assess the products during the 1982-83 school year. The results from field testing the Management Support Kit will contribute to ideas for the development of a divisionwide instructional management system.

What MET Includes...

- a coding system for the mathematics Program of Studies
- a planning process for the first nine weeks of school, and daily/weekly and long-range models
- a record keeping system for the mathematics Program of Studies and accessment resources (Program of Studies tests) for managing the diagnostic prescriptive teaching process
- a chart which identifies and matches the Program of Studies items with specific mathematics skills
- a sample letter to parents to convey purposes of the Program of Studies testing and the manner in which to interpret test results
- a teacher plan book designed, piloted and revised by teachers
- a set of supplementary and adaptable teaching ideas
- a principal's checklist for opening and closing school

How MET Works...

It incorporates good management practice into the instructional program.

It organizes teaching strategies.

It coordinates teaching materials and diagnostic resources with the Program of Studies.

For Additional Information about Project MET
(Management for Effective Teaching), contact:

Patricia Moore Harbour, Ed.D.
Department of Instructional Services
3705 Crest Avenue
Annandale, VA 22003

PROGRAM OF STUDIES
MATHEMATICS, KINDERGARTEN THROUGH LEVEL SIX
TEXTBOOK CORRELATIONS
FIELD-TEST EDITION

Fairfax County Public Schools
Department of Instructional Services
Office of Elementary Education

CONTENTS

	PAGE
How to Use the Correlation Charts	1
Correlation Chart for Kindergarten Level	3
Correlation Chart for Level 1	9
Correlation Chart for Level 2	17
Correlation Chart for Level 3	27
Correlation Chart for Level 4	39
Correlation Chart for Level 5	51
Correlation Chart for Level 6	63

Textbook correlations are for Mathematics Their Way and On the Road to Understanding Mathematics at the kindergarten level and for teacher's editions of the three adopted series, HBJ Mathematics, McGraw Hill Mathematics, and Real Math in levels 1 through 6. Reviews, tests and practices are, for the most part, not included. In this field-test edition, teachers are invited to make additions, deletions, or corrections for the page numbers.

HOW TO USE THE CORRELATION CHARTS

1. Use the Mathematic Program of Studies' document and determine the objective to be taught.

2. Locate the assigned math skills code that matched the POS objective.

3. Use the assigned math skills code to locate on the chart the page number(s) and the text(s) which relate to the objective(s).

4. Note the final column, Resources/Notes, is provided for your use as you identify additional materials to aid in teacher or reinforcing the objective. An additional Instructional Coding System format is included in this folder for your convenience as you record supplementary materials.

MATHEMATICS PROGRAM OF STUDIES - TEXTBOOK CORRELATION

KINDERGARTEN LEVEL

MATH SKILLS CODE	POS OBJECTIVES	Mathematics Their Way	On the Road to Understanding Mathematics	Resources/Notes
	Exploration			
MK EX 01.A	Explores with capacities, weights, mirrors, colors, designs, objects.	2-17		
	Patterns			
	1. Kinds			
MK PA 01.A	Analyzes, duplicates, and continues patterns using devices such as rhythmic sequences, lines and dots, objects, geoboards, geometric shapes, and pictures.	20-42, 52-55		
	2. Position			
MK PA 02.A	a. Uses words to denote position such, as up, down, over, under, below, on, inside, outside, in front of, behind, beside, top, middle, bottom.		11-17	
MK PA 02.B	b. Uses correctly the words: left and right.		15, 18-21	
	Sorting and Classifying			
MK SC 01.A	1. Sorts and classifies according to each of the following: size, shape, color, detail, and texture.	58-87		
MK SC 01.B	2. Describes the common properties of a group of objects that have been sorted or classified.	58-87		

Textbook Correlation
Kindergarten Level

MATH SKILLS CODE	POS OBJECTIVES	Mathematics Their Way	On the Road to Understanding Mathematics	Resources/Notes
	Numeration			
	1. Whole Numbers			
MK NU 01.A	a. Counts from 1 through 10.	90-95	55-64	
MK NU 01.B	b. Reads the numbers 0 through 10.	196, 217	65	
MK NU 01.C	c. Traces the numbers 0 through 10.	43-51		
MK NU 01.D	d. Matches the numbers 1 through 10 to the correct number of objects; matches the number of objects to the correct number (one-to-one correspondence).	96-102, 171	43-51	
MK NU 01.E	e. Uses the word "zero" to mean "not any" or "there are none."	127	89-91	
MK NU 01.F	f. Counts backwards from 10 through 1.	106-111	68	
MK NU 01.G	g. Counts on through 10 from a given number (2 through 9).	103-105	66-67	
MK NU 01.H	h. Given two groups of objects, determines which has more, which has less, or if they have the same.	116-118, 125-130	71-74	
MK NU 01.I	i. Given a number (0 through 9) names the number that is one more than; given a number (1 through 10) names the number that is one less than.		73-75	
	2. Ordinal Numbers			
MK NU 02.A	Recognize first and last, and makes correct assignment of ordinal numbers first through sixth.	205,207	109-116	
	3. Fractions			
MK NU 03.A	a. Recognizes two equal parts, with each part identified as one half.		121-126, 131	

Textbook Correlation
Kindergarten Level

MATH SKILLS CODE	POS OBJECTIVES	Mathematics Their Way	On the Road to Understanding Mathematics	Resources/Notes
MK NU 03.B	b. Recognizes three and four equal parts.		126-130	
	Foundation for Operations 1. Addition, Subtraction, Multiplication, and Division			
MK OP 01.A	Explores and describes the possible arrangements of a given number of objects.	166-178		
	2. Addition			
MK OP 02.A	Intuitively adds, recognizes the whole as the sum of its parts (sums through 10, with objects).	103-105, 179-190, 192, 207, 217-220		
	3. Subtraction			
MK OP 03.A	Intuitively subtracts, separating the whole into parts (minuends through 10, with objects).	106-111, 179-190, 192-194, 197-208, 217-218		
	Statistics and Graphs 1. Real, Picture, and Symbolic Graphs			
MK ST 01.A	Compares two, three, and four groups by constructing first, real graphs; second, picture graphs, and third, symbolic graphs.	142-163		
	2. Bar Graphs			
MK ST 02.A	Constructs simple bar graphs using objects and cutouts.	142-168		

Textbook Correlation
Kindergarten Level

MATH SKILLS CODE	POS OBJECTIVES	Mathematics Their Way	On the Road to Understanding Mathematics	Resources/Notes
	Geometry			
MK GE 01.A	Identifies the following: circles, squares, rectangles, and triangles.		25-37	
	Measurement 1. Terms			
MK ME 01.A	Uses terms such as longer and shorter; bigger and smaller; heavier and lighter; same; too little, too much, just right; hotter and colder.	116-137	76-78, 103-104	
	2. Lengths			
MK ME 02.A	Compares lengths of two or more objects.	119-121, 135	76-80	
	3. Weights			
MK ME 03.A	Compares weights of two or more objects.	122-132		
	4. Capacities			
MK ME 04.A	Compares capacities of two or more containers.	131,136	81	
	5. Instruments			
MK ME 05.A	Recognizes that a thermometer measures temperature, a balance scale measures weight, and a ruler measures length.		86, 103-104	

Textbook Correlation
Kindergarten Level

MATH SKILLS CODE	POS OBJECTIVES	Mathematics Their Way	On the Road to Understanding Mathematics	Resources/Notes
	Money			
MK MY 01.A	Selects the requested coin when given a penny, nickel, dime, and quarter.	225	135-141	
	Time 1. Events			
MK TE 01.A	a. Orders chronological events.		95-96	
MK TE 01.B	b. Explores duration of events by measuring the length of an event with a simple device such as a timer.	123-124, 133-134		
	2. Clocks and calendars			
MK TE 02.A	Recognizes clocks and calendars.		97-99	
	Word Problems			
MK WP 01.A	Examples of word problems.	204-206		

MATHEMATICS PROGRAM OF STUDIES - TEXTBOOK CORRELATION

LEVEL 1

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Patterns 1. Shapes				
M1 PA 01.A	Continues size, shape, and color patterns in sequences of geometric shapes.	281-282	125-127		
	2. Numbers				
M1 PA 02.A	a. Finds doubles of numbers (0 through 10).			92-93, 124-125, 146, 213-214	
M1 PA 02.B	b. Skip counts by 2's, 5's, and 10's (0 through 100).	154, 167-170	181-182, 191, 197	102-103, 186-187, 190-191, 258-261	
M1 PA 02.C	c. Finds a given number in a patterned sequence of numbers (0 through 100).			114-117	
M1 PA 02.D	d. Continues a given number pattern by finding or following the rule.	(Enrichment: 35, 47-48, 89, 98, 178) 204 250, 262	104	158-159	
	Numeration 1. Whole Numbers				
M1 NU 01.A	a. Writes the numbers 0 through 10.	8, 10, 12, 14, 16, 18-19, 56, 58-59, 62, 66, 68-69	17-24, 51	10-17, 26-27	
M1 NU 01.B	b. Reads the number words, zero through ten.	7-17, 55-67	57-58		

Textbook Correlation
Level 1

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Note
	Numeration (Continued)				
M1 NU 01.C	c. Counts forwards from 1 through 100.	60, 70, 78, 148, 162	7-8, 25, 57-58, 183-190, 199	2-9, 16-25, 86-87, 90-91, 138-141, 198-199, 242-243, 246-247	
M1 NU 01.D	d. Determines the number of objects in a group, first by sorting by tens and ones, then by counting the tens and the ones; identifies in 2-digit numbers the number of tens and ones; given the number of tens and ones identifies the number.	142-152, 155-158	179-190, 198	88-89, 142-143, 188-189	
M1 NU 01.E	e. Reads and writes 2-digit numbers	142-147	183-184, 186, 188, 190, 193	244-245	
M1 NU 01.F	f. Counts forwards from a given number (through 100).	160	184, 186, 188, 190, 194	56-57	
M1 NU 01.G	g. Counts backwards from a given number (from 100).		26, 194	24-25, 138-139	
M1 NU 01.H	h. Identifies the number or numbers between two different numbers (through 99).	73-76, 147, 159-161	194	24-25, 140-141, 198-199	
M1 NU 01.I	i. Identifies numbers that are greater than a given number and less than a given number (through 100).	5-6, 163-166	5-6, 59-62, 195-196	108-109, 248-249	
	2. Ordinal Numbers				
M1 NU 02.A	Makes correct assignment of ordinal position first through tenth.	(through fifth: 171-172)	(through fifth: 63-64)	217-218	

Textbook Correlation
Level I

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Numeration (Continued)				
	3. Fractions				
M1 NU 03.A	Uses $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$ to identify parts of a whole and parts of a group.	272-277	259-269	164-165, 215-216	
	Operations				
	1. Addition of Whole Numbers				
M1 OP 01.A	a. Represents addition facts for sums through 18; writes facts in both horizontal and vertical forms.	24-36, 82-90, 99-105, 113, 198-203, 211-216, 223, 246-249, 255-258, 267, 283	69-87, 131-136, 138, 145, 159, 161-167, 227, 229-231, 233-235, 273-280	34-41, 48-49, 52-61, 74-77, 80-81, 84-85, 98-101, 223-235 (through 10 + 10)	
M1 OP 01.B	b. Explores addition of 2-digit numbers (sums to 99)	179-184, 191-192	241-246, 254-255	126-131, 182-183, 200-203, 207-210	
M1 OP 01.C	c. Adds three 1-digit numbers (sums to 18).	264-266	137, 174, 236		
M1 OP 01.D	d. Recognizes the commutative property of addition.	24-28	159, 161-163, 229-231, 233-234, 273, 275, 277, 279		
	2. Subtraction of Whole Numbers				
M1 OP 02.A	a. Represents subtraction facts with minuends through 18; writes facts in both horizontal and vertical forms.	37-50, 91-98, 107-112, 114, 177-178, 205-210, 217-222, 224, 259-261, 268, 283	93-111, 139-144, 146, 160-162, 164-168, 172-173, 228-230 232-235, 273-280	42-47, 48-49, 52-59, 62-63, 78-79, 82-85	

Textbook Correlation
Level 1

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Operations (Continued)				
M1 OP 02.B	b. Explores subtraction of 2-digit numbers (minuends to 99).	185-190, 193-194	247-252, 254	128-131, 182-183, 200-203, 207-210, 246-247	
	3. Addition and Subtraction of Whole Numbers				
M1 OP 03.A	a. Relates addition and subtraction facts through solving simple sentences involving families of numbers (missing addends, missing subtrahends, or missing minuends).	(Enrichment: pp. 312, 317)	103, 147-149, 161-162, 165 229-230, 233-234, 273-275, 277-280, 279-280	76-79, 94-97, 104-107, 162-163, 184-185	
M1 OP 03.B	b. Inserts the correct operation sign (+ or -) in a simple number sentence where the sign is missing.	284		156	
	Statistics and Graphs 1. Tallies				
M1 ST 01.A	Makes tallies to keep an accurate count of events.			28-29, 110-111, 211-212	
	2. Graphs				
M1 ST 02.A	a. Matches numbers to a graph (bar graphs).	71-72, 77, 126	25-26, 65		
M1 ST 02.B	b. Constructs simple bar graphs.	125-126			

Textbook Correlation
Level 1

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Note
	Geometry 1. Polygons				
M1 GE 01.A	a. Identifies characteristics of circles, squares, rectangles and triangles; discusses similarities and differences.	118-123	117-124	72-73	
M1 GE 01.B	b. Makes squares, rectangles, triangles, and circles.	124			
	2. Solids				
M1 GE 02.A	Recognizes rectangular solids (prisms), cubes, cylinders, cones, and spheres.		115-116		
	Measurement 1. Nonstandard				
M1 ME 01.A	a. Represents lengths and heights using nonstandard measures.		211-212	32-33, 36-37	
M1 ME 01.B	b. Compares lengths and heights using nonstandard measures (longer, shorter).	127-128	31-37	34-35	
M1 ME 01.C	c. Compares weights using a balance scale (heavier, lighter).		215	140-141	
M1 ME 01.D	d. Compares sizes of objects (large, small).	3-4	29-30		
M1 ME 01.E	e. Continues to compare capacities of two or more, containers (more, less).	133-134, 137-138	217-218, 221		

Textbook Correlation
Level 1

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Measurement (Continued)				
	2. Metric				
M1 ME 02.A	Measures lengths of objects in centimeters.	129-132	213-214		
	3. Traditional				
M1 ME 03.A	Measures lengths of objects in inches.	135-136	218-219		
	Money				
	1. Values				
M1 MY 01.A	a. Matches pennies, nickels, dimes, and quarters with their numerical values.	228, 231	169, 253	70-71, 122-123	
M1 MY 01.B	b. Finds the value of a collection of pennies, nickels, dimes, and quarters using no more than three different coins (through 99¢).	228-232	170, 192, 253, 281	(pennies and dimes: 70-71, 122-123, 144-149, 190-192)	
	2. Prices				
M1 MY 02.A	Matches prices of objects to a collection of pennies, nickels, and dimes (through 99¢).	(up to 51¢: 233-234)	171, 237	(pennies and dimes: 70-71)	

Textbook Correlation
Level 1

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Time				
	1. Clocks				
M1 TE 01.A	Reads and writes hour times and half-hour times.	235-240	203-208	250-251, 254-255	
	2. Calendars				
M1 TE 02.A	a. Names consecutively the days of the week.	241-242	209-210	252-253	
M1 TE 02.B	b. Reads dates on a calendar.	241-242	209-210	252-255	
	Estimation				
	1. Time				
M1 ES 01.A	Estimates given time intervals; then measures, using a simple timing device.			48-49, 52-53	
	2. Operations				
M1 ES 02.A	Estimates sums and differences (sums through 99, minuends through 99).			160-161, 204-205	
	3. Length				
M1 ES 03.A	a. Estimates given lengths in nonstandard units; then measures.			100-101, 126-129, 156-157	

Textbook Correlation
Level 1

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Estimation (Continued)				
M1 ES 03.B	b. Estimates how many times longer (2 through 6) lengths are as compared with given standards; then measures.			172-175, 178-179	
	4. Fractional Parts				
M1 ES 04.A	Estimates fractional parts ($\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$) of given lengths or heights.			166-173	
M1 WP 01.A	Word Problems	83-84, 106, 209-210, 280, 285-287	74-75, 94-95, 151-152, 175, 255, 280	118-119, 176-177, 204-208	

MATHEMATICS PROGRAM OF STUDIES - TEXTBOOK CORRELATION

LEVEL 2

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Patterns				
	1. Shapes				
M2 PA 01.A	Continues patterned sequences of geometric shapes.	275-276	79-80		
	2. Numbers				
M2 PA 02.A	a. Identifies even and odd numbers.		278	210-213	
M2 PA 02.B	b. Skip counts by 2's, 3's, 4's, 5's, and 10's (in sequences between 0 and 1,000).	164-168, 252	69-70, 169-170, 257-258, 282	62-63, 235-236	
M2 PA 02.C	c. Determines the rule for continuing a pattern in a sequence of numbers for numbers learned at this level.	16, 43, 141			
	Numeration				
	1. Whole Numbers				
M2 NU 01.A	a. Reads and writes 3-digit numbers.	2-3, 5-9, 11, 12, 22, 156-162	1-4, 56, 58, 60, 63-64, 169-170	2-6, 12-13, 160-163, 286-287	
M2 NU 01.B	b. Counts forwards from a given number (through 1,000); counts backwards from a given number (from 1,000).	9, 163, 169-170	1-4, 56, 58, 60, 63-64, 169-170	2-6, 12-13, 160-163, 286-287	

Textbook Correlation
Level 2

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Numeration (Continued)				
M2 NU 01.C	c. Identifies in 3-digit numbers the number of hundreds, tens, and ones; given the number of hundreds, tens, and ones identifies the number.	5-8, 156-162, 224	53-63, 161-168	58-64, 83, 100-101, 164-166, 286-287	
M2 NU 01.D	d. Identifies the number or numbers between two different numbers (through 1,000).	11-12, 22, 163-164, 175-176	56, 58, 60, 63, 169-170	5-6, 12-13, 160-163, 286-287	
M2 NU 01.E	e. Identifies numbers that are greater than or less than a given number (through 1,000).	4, 13-14, 169-174	65-66, 171-172	162	
M2 NU 01.F	f. Uses correctly the symbols <, =, > between two numbers (through 1,000).			154-156	
	2. Ordinal Numbers				
M2 NU 02.A	Makes correct assignment of ordinal position first through twelfth.	(through tenth: 17-20)	67-68		
	3. Fractions				
M2 NU 03.A	Uses halves, thirds, fourths, fifths and other common fractions to identify parts of a whole and parts of a group.	214-220	243-253	130-139	

Textbook Correlation
Level 2

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Operations 1. Addition of Whole Numbers				
M2 OP 01.A	a. Knows addition facts for sums through 18.	24-28, 37, 39, 41-42, 49, 53-54, 74-78, 82-84, 89, 91-92, 95, 126-127, 132-134, 137-138, 141, 143	5-20, 94-95, 97-98, 101-110	18-31, 35-39, 51-54, 76-78	
M2 OP 01.B	b. Adds two numbers having as many as two digits each (sums through 99).	99-102, 149, 151, 222, 225-229, 231, 245-246	119-122, 133-134, 137, 205-214, 218, 238-239	14-17, 84-91, 94-97, 117-118	
M2 OP 01.C	c. Adds three numbers having as many as two digits each (sums through 99).	47-48, 97-98, 103-104, 147	21, 111, 123-124, 127-128, 219	62-64, 79-82, 157-159	
M2 OP 01.D	d. Recognizes and applies the following properties of addition				
	(1) adding the number 0 (identity property; 5 + 0 = 5; 0 + 5 = 5)	26	11, 13	14-17	
	(2) switching addends (commutative property; 2 + 3 = 3 + 2)	29-30	12-13, 17, 19, 48, 91-93, 101, 103, 105, 107, 109	21	
	2. Subtraction of Whole Numbers				
M2 OP 02.A	a. Knows subtraction facts with minuends through 18.	31-36, 38-39, 43, 44, 46, 50, 53-54, 79-80, 82, 85-86, 93-94, 129-130, 135-137, 144	27-43, 92-94, 96-98, 101-110	30-31, 36-54, 98-99	

Textbook Correlation
Level 2

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Operations (Continued)				
M2 OP 02.B	b. Subtracts two numbers having as many as two digits each.	105-109, 150-151, 233-239, 241, 247-248	127-130, 133-134, 137, 225-234, 237-239	14-17, 30-31, 62-64, 100-118	
	3. Addition and Subtraction of Whole Numbers				
M2 OP 03.A	a. Recognizes that addition and subtraction are inverse operations; checks subtraction by addition.	45-46	47-48	34-37, 113-114	
M2 OP 03.B	b. Relates addition and subtraction through solving simple sentences involving families of numbers (missing addends, missing subtrahends and minuends; inverse operations) for numbers learned at this level.	45-46, 81	12-13, 17, 19, 48, 91-93, 101 103, 105, 107, 109	32-35	
M2 OP 03.C	c. Inserts the correct operation sign (+ or -) in a number sentence where the sign is missing for numbers learned at this level.	51, 87-88, 145-146	238		
M2 OP 03.D	d. Adds and subtracts several numbers (chain calculations).	52, 96, 139 148	55-57, 77, 276-277		
	4. Multiplication of Whole Numbers				
M2 OP 04.A	a. Represents multiplication facts for products through 81; writes facts in both horizontal and vertical forms.	(factors 2, 3, 4, 5, and 10: 253-254, 256-262)	(factors 2, 3, 4, and 5: 259-268)	235-239, 242-251	
M2 OP 04.B	b. Multiplies 1-digit numbers by 10, and 10 by 10.	263-266		237-239, 244-251	

Textbook Correlation
Level 2

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resource Guides
	Operations (Continued)				
M2 OP 04.C	c. Recognizes the commutative property of multiplication (2 x 3 = 3 x 2).	255			
	5. Division of Whole Numbers				
M2 OP 05.A	Explores division facts.	269-270	273-277, 279	265-267	
	Statistics and Graphs				
	1. Tallies				
M2 ST 01.A	Makes and summarizes tallies to keep track of events.			60-61, 256-260	
	2. Graphs				
M2 ST 02.A	Interprets and constructs simple bar and picture graphs.	(bar: 121, 122)	85, 136, 269, 280-281	(bar: 261-262, 181)	
	3. Tables				
M2 ST 03.A	Reads and interprets simple tables.		115		
	Geometry				
	1. Polygons				
M2 GE 01.A	a. Identifies squares, rectangles, and triangles according to number and length of sides and number of corners.	114-116	77-78		

Textbook Correlation
Level 2

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Operations (Continued)				
	2. Solids				
M2 GE 02.A	Identifies examples of solids within the environment.		83-84		
	3. Symmetry				
M2 GE 03.A	Determines lines of symmetry in plane geometric figures.	119-120		284-285	
	4. Congruency				
M2 GE 04.A	Identifies two or more congruent plane geometric figures.		81-82	142-146	
	Measurement				
	1. Metric				
M2 ME 01.A	a. Measures lengths of objects in centimeters and meters.	(centimeters: 58-62)	185-190	65-66, 218-219, 185-186	
M2 ME 01.B	b. Discusses the relationship between centimeters and meters.		189-190	218-219	
M2 ME 01.C	c. Measures weights of objects in grams and kilograms.		191	218-219	
M2 ME 01.D	d. Discusses the relationship between grams and kilograms.			218-219, 224-225	
M2 ME 01.E	e. Measures volumes of containers in liters.	65-66	192		

Textbook Correlation
Level 2

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Measurement (Continued)				
	2. Traditional				
M2 ME 02.A	a. Measures lengths of objects in inches, feet, and yards.	(inches: 67-68)	(inches and feet: 195-197)	67-68, 220-221	
M2 ME 02.B	b. Discusses the relationships among inches, feet, and yards.		197	220-221	
M2 ME 02.C	c. Measures weights of objects in ounces and pounds.		(pounds: 198)	220-221	
M2 ME 02.D	d. Discusses the relationship between ounces and pounds.			220-221	
M2 ME 02.E	e. Measures volumes of containers in cups, pints, and quarts.	69-70		226-227	
M2 ME 02.F	f. Discusses the relationships among cups, pints, and quarts.	69-70	199-200	226-227	
	3. Dozen				
M2 ME 03.A	Recognizes that a dozen is 12 objects; that 1/2 a dozen is 6 objects.				
	4. Area				
M2 ME 04.A	Finds areas by counting squares (whole numbers only).	63-64		240-241	

Textbook Correlation
Level 2

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Money 1. Collections of Bills and Coins				
M2 MY 01.A	Finds the value of a collection of coins (including half-dollars) and $1 bills.	184-194	22, 71-72, 125, 149-154, 179	7-9, 58-61, 183-184	
M2 MY 02.A	2. Writes money value both with cents and decimal notation.	193-194	153-154	183-184	
	3. Addition				
M2 MY 03.A	Adds two money amounts (cents).	197	125-126, 180, 217		
	4. Subtraction				
M2 MY 04.A	Subtracts two money amounts (cents).	195-196, 198, 244, 285	44, 73, 131-132, 155, 180		
	Time 1. Clocks				
M2 TE 01.A	a. Uses the words "quarter" and "half" to express multiples of 15 minutes on a clock face.	203-206	(half: 143-144)	123-129, 140-141	
M2 TE 01.B	b. Reads and writes time to the nearest five minutes.	200-210	141-146	192-197	

Textbook Correlation
Level 2

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Time (Continued)				
	2. Calendars				
M2 TE 02.A	a. Names consecutively the months in the year and states the number of days in each month.	15-16	147-148	10-12	
M2 TE 02.B	b. Examines a monthly calendar for relationships among days weeks, and months.	15-16	147-148	10-12	
	Estimation				
	1. Number				
M2 ES 01.A	Estimates the number of objects in a given set of objects for numbers learned at this level.			2-4, 162-164	
	2. Operations				
M2 ES 02.A	Estimates sums and differences for numbers learned at this level.	278		187-191	
	3. Metric Measurement				
M2 ES 03.A	a. Estimates lengths of objects in centimeters; then measures.	58, 61	187-188	222-225, 193-194	
M2 ES 03.B	b. Estimates lengths of objects in meters; then measures.			193-194	
M2 ES 03.C	c. Estimates weights of object in grams; then measures.			222-223	

Textbook Correlation
Level 2

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Estimation (Continued)				
M2 ES 03.D	d. Estimates weights of objects in kilograms; then measures.		193-194		
M2 ES 03.E	e. Estimates volumes of containers in liters; then measures.	65-66	193-194		
	4. Traditional Measurement				
M2 ES 04.A	a. Estimates lengths of objects in inches; then measure.	67			
M2 ES 04.B	b. Estimates lengths of objects in feet; then measures.		197		
M2 ES 04.C	c. Estimates weights of objects in ounces and pounds; then measures.		198		
M2 ES 04.D	d. Estimates volumes of containers in quarts; then measures.	69-70	199		
M2 WP 01.A	Word Problems	40, 90, 110, 131, 140, 152, 230, 232, 240, 242, 267-268, 274, 279-280, 283-284, 286	23, 45-46, 49, 99-100, 113-114, 135, 178, 215-216, 235-236, 268	26-27, 51-54, 92-93, 98-99, 110-112, 119-122, 144-146, 183-186, 189-191, 204-207, 224-227, 252-255	

MATHEMATICS PROGRAM OF STUDIES - TEXTBOOK CORRELATION

LEVEL 3

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Note
	Number Patterns				
M3 PA 01.A	Finds and/or follows the rule of a pattern for numbers learned at this level.	16, 32, 43, 48-49, 144, 234, 269	6-7, 59	96-97, 139-146	
	Numeration				
	1. Whole Numbers				
M3 NU 01.A	a. Identifies in numbers having as many as six digits the number of hundred thousands, ten thousands, thousands, hundreds, tens, and ones; assigns place value; writes these numbers.	(through thousands: 31-32, 35, 38-41, 43, 45-47)	2-4, 8-13, 18-20, 310-311	4-5, 8-10, 24-25, 28-30, 100-101	
M3 NU 01.B	b. Counts forwards from a given number (through 1,000,000); counts backwards from a given number (through 1,000,000).			2-5, 8-10, 286-287	
M3 NU 01.C	c. Identifies numbers that are greater than or less than a given number (through 1,000,000).	(through thousands: 33)	14-15, 310-311	4-5, 8-10	
M3 NU 01.D	d. Uses correctly the symbols < , =, > between two numbers (through 1,000,000).	34, 44	14	59-60	
M3 NU 01.E	e. Rounds to the nearest ten.	36-37			
	2. Fractions				
M3 NU 02.A	a. In common fractions, recognizes that the numerator indicates the part and the denominator the whole.	199-201, 205-206	278-281, 284-285, 288-289	204-210, 213-216	

Textbook Correlation
Level 3

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Numeration (Continued)				
M3 NU 02.B	b. Recognizes that the same fractional part of two different wholes or groups are not necessarily equal.	201	282		
M3 NU 02.C	c. Compares two different fractional parts of the same whole (like denominators, unlike numerators).	208	282-283	206-208	
M3 NU 02.D	d. Represents equivalent fractions with denominators through tenths.	209		217-220	
	3. Decimals				
M3 NU 03.A	a. Writes decimals for tenths and relates to fractions.	211-212, 214	294-295	174-177, 186-188	
M3 NU 03.B	b. Writes decimals for hundredths and relates to fractions.			180-188	
M3 NU 03.C	c. Uses the symbols $<$, $=$, $>$ between two decimals (through tenths).	(orders only: 213-214)		189-190, 196-197	
	4. Roman Numerals				
M3 NU 04.A	Reads and writes Roman numerals (through thousands).			234-236	

Textbook Correlation
Level 3

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Operations 1. Addition of Whole Numbers				
M3 OP 01.A	a. Adds two numbers where the numbers may have as many as four digits.	3-5, 10-13, 19-20, 55-61, 65-71, 75-78	26-27. 38, 50-51, 56-59, 64-71, 302-303	11-12, 16-17, 22-23, 26-27, 39-45, 53-56	
M3 OP 01.B	b. Adds three and four addends with each addend having no more than four digits.	17, 21, 62, 64, 74, 79	29-41, 72-73	49-50, 51-52	
M3 OP 01.C	c. Applies the following properties of addition				
	(1) adding the number 0 (identity property; 3 + 0 = 3; 0 + 3 = 3)	3-5	32	16-17	
	(2) switching addends (commutative property; 2 + 3 = 3 + 2).	11	28		
	(3) grouping addends associative property; (2 + 3) + 4 = 2 + (3 + 4) .	17			
	2. Subtraction of Whole Numbers				
M3 OP 02.A	a. Subtracts two numbers where the minuend has as many as four digits.	6-8, 10-13, 22-24, 91, 93-101, 102-107, 110-113,	30-31, 42-45, 50-51, 84-89, 94-98, 100-101, 304-305	11-12, 16-17, 22-24, 31-32, 39-45, 53-56	
M3 OP 02.B	b. Recognizes that subtraction is neither commutative nor associative.				

Textbook Correlation
Level 3

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Operations (Continued)				
	3. Addition and Subtraction of Whole Numbers				
M3 OP 03.A	Relates addition and subtraction through solving simple sentences involving families of numbers (missing addends, missing minuends and subtrahends, inverse operations) for numbers learned at this level.	11, 97	32-33, 39, 101, 106-107	13-15, 143-146	
	4. Multiplication of Whole Numbers				
M3 OP 04.A	a. Relates repeated addition to multiplication.	135-138	142-143, 148	82-83	
M3 OP 04.B	b. Knows multiplication facts for products through 81; writes facts in both horizontal and vertical forms.	140-150, 153, 157-158, 223-230	142-148, 150-153, 156-157, 164-177, 182-183	82-93, 102-120, 168-169, 257-258	
M3 OP 04.C	c. Multiplies three 1-digit factors.	15	181		
M3 OP 04.D	d. Recognizes and applies the following properties of multiplication				
	(1) multiplying by the number 1 (identity property; 3 x 1 = 3).	155, 230	154-155	102-103	
	(2) multiplying by the number 0 (3 x 0 = 0; 0 x 3 = 0).	155, 223, 230	154-155	102-103	
	(3) switching factors (commutative property; 2 x 3 = 3 x 2).	141, 146, 149, 230	164-165, 166-169, 172-173, 176	94-95, 102-103	
M3 OP 04.E	e. Multiplies numbers having as many as three digits by 10.	156	318-319	98-99	

Textbook Correlation
Level 3

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Operations (Continued)				
M3 OP 04.F	f. Finds squares of numbers 0 through 10.	230		115-116	
M3 OP 04.G	g. Multiplies 2- and 3-digit numbers by 1-digit numbers.	232-235, 233, 236, 238-240	320-327	259-269, 272-273	
	5. Division of Whole Numbers				
M3 OP 05.A	a. Represents division facts; writes facts with both ÷ and ⌐.	246-267	214-218, 220-221, 225-229, 238-249	123-130	
M3 OP 05.B	b. Recognizes that a number divided by 1 is the number, and that 0 divided by a number other than 0 is 0.	260	224		
M3 OP 05.C	c. Divides 1- and 2-digit numbers by 1-digit numbers.	270-275	254-255, 328-335	131-132	
	6. Multiplication and Division of Whole Numbers				
M3 OP 06.A	Relates multiplication and division through solving simple sentences involving families of numbers (missing factors, missing divisors and dividends) for numbers learned at this level.	225, 250-259	155, 180-181, 230-231, 245, 250-251	91-93, 125-130, 143-146	
	7. Addition, Subtraction, Multiplication, and Division of Whole Numbers				
M3 OP 07.A	Makes chain calculations.	257	99	20-21, 133-134	

Textbook Correlation
Level 3

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Operations (Continued) 8. Addition of Decimals				
M3 OP 08.A	Adds two decimals (through tenths).	215		191-193, 196-197, 202-203	
	9. Subtraction of Decimals				
M3 OP 09.A	Subtracts two decimals (through tenths).	216		194-197, 202-203	
	Statistics and Graphs 1. Graphs and Tables				
M3 ST 01.A	a. Reads and interprets data from bar graphs, line graphs, and tables.	9, 80-81, 283 (bar), 298 (bar)	9, 21, 92-93, 178-179, 260-264, 266-267	6-7, 154-159	
M3 ST 01.B	b. Compiles data into graphs and tables.	81, 283, 298	137, 178-179, 265, 268-269	6-7, 158-159, 168-171, 239-240	
	2. Ordered Pairs				
M3 ST 02.A	Graphs ordered pairs of whole numbers on a grid.	(locates points: 195)	270-273	168-169	
	Geometry 1. Lines, Angles, and Polygons				
M3 GE 01.A	a. Identifies points, lines, and angles.	(angles: 182)	190, 193	247-248	

Textbook Correlation
Level 3

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Geometry (Continued)				
M3 GE 01.B	b. Identifies parallel sides in a given quadrilateral.			249-250	
M3 GE 01.C	c. Names parallelograms and trapezoids.			249-250	
M3 GE 01.D	d. Identifies right angles.	183	193		
	2. Circles				
M3 GE 02.A	a. Recognizes that the points of a circle are all the same distance from the center.		202-203	251-252	
M3 GE 02.B	b. Relates diameters and radii of a circle.		203	253-254	
	3. Symmetry				
M3 GE 03.A	Draws lines of symmetry in plane geometric figures.	184-185	200-201	253-254	
	4. Congruency				
M3 GE 04.A	Describes congruency and matches congruent plane geometric figures.	186, 188-189	192, 198-199		
	5. Similarity				
M3 GE 05.A	Describes similarity and matches similar plane geometric figures.	187, 188-189			

Textbook Correlation
Level 3

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Geometry (Continued) 6. Solids				
M3 GE 06.A	Identifies faces and edges in solid geometric figures.	190, 192			
	Measurement 1. Metric				
M3 ME 01.A	a. Discusses the relationship between meters and kilometers.	281-282, 284	120-123	160-161, 180-181	
M3 ME 01.B	b. Measures lengths in decimeters; discusses the relationships among centimeters, decimeters and meters.			178-179	
M3 ME 01.C	c. Measures volumes in cubic centimeters, milliliters, and liters; discusses the relationship between milliliters and liters.	288, 291		227, 229-231	
	2. Traditional				
M3 ME 02.A	a. Discusses the relationships among feet, yards, and miles.	293-294	130-131	164-165	
M3 ME 02.B	b. Discusses the relationship between pounds and tons.	297			
M3 ME 02.C	c. Measures volume in gallons; discusses the relationships among cups, pints, quarts, and gallons.	295-296	132-133	232-233	

Textbook Correlation
Level 3

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Measurement (Continued)				
	3. Temperature				
M3 ME 03.A	a. Writes temperatures in degrees Celsius (whole numbers).	292	127		
M3 ME 03.B	b. Writes temperatures in degrees Fahrenheit (whole numbers).	299	136-137		
	4. Perimeter				
M3 ME 04.A	Finds perimeters of polygons by adding the lengths of the sides.	285-286	196-197	63-64	
	5. Area				
M3 ME 05.A	Finds areas of rectangles by multiplying the length and width.	287	(counting squares: 204-205)	78-81, 255-256	
	6. Volume				
M3 ME 06.A	Finds volumes of solids constructed from cubes by counting the number of cubic units.	288		227	
	7. Scale Drawings				
M3 ME 07.A	Makes simple scale drawings on a grid.			243-246	

Textbook Correlation
Level 3

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Measurement (Continued) 8. Approximate Nature of Measurement				
M3 ME 08.A	Recognizes that all measurement is approximate and appreciates the fact that the smaller the unit of measurement the closer the approximate measure.			87-88	
	Money 1. Collection of Coins and Bills				
M3 MY 01.A	Finds the value of a collection of coins and bills ($1 and $5).	127-129	16-17, 47	174-175, 182-185	
	2. Addition				
M3 MY 02.A	Adds two money amounts (sums through $99.99).	82-83, 114-115, 129	46-47, 62-63, 74-75, 77-79	49-50	
	3. Subtraction				
M3 MY 03.A	Subtracts two money amounts (minuends through $99.99.	114-115	46-47, 102-103	90-91	
	4. Multiplication				
M3 MY 04.A	Multiplies money amounts (through $99.99) by 1-digit numbers.	241		(cents only: 89-90)	

Textbook Correlation
Level 3

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Money (Continued) 5. Rounding				
M3 MY 05.A	a. Rounds to the nearest 10 cents.	36-37			
M3 MY 05.B	b. Rounds to the nearest dollar.		76		
	6. Change				
M3 MY 06.A	Determines how much change will be received from $5.00 or less when paying for an item with an amount of money less than $5.00.	103, 114-115	103		
	Time 1. Clocks				
M3 TE 01.A	a. Reads and writes time to the nearest minute, including before and after the hour.	123-124	112-115	67-70	
M3 TE 01.B	b. Tells how many hours and how many minutes between two given times.	125	116-117		
	2. Calendars				
M3 TE 02.A	On a yearly calendar finds intervals of from one to four weeks from a given day.				

Textbook Correlation
Level 3

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Estimation				
	1. Operations				
M3 ES 01.A	a. Estimates sums and differences for numbers learned at this level.		77	61-62, 65-66	
M3 ES 01.B	b. Estimates products for numbers learned at this level.			282-283	
	2. Metric Measurement				
M3 ES 02.A	a. Estimates lengths of objects in meters; then measures.	281-282		160-163, 166-167	
M3 ES 02.B	b. Estimates volumes of containers in milliliters; then measures.		126	227-231	
	3. Traditional Measurement				
M3 ES 03.A	a. Estimates length of objects in yards; then measures.			166-167	
M3 ES 03.B	b. Estimates volumes of containers in cups, pints, quarts, and gallons; the measures.		132-133		
M3 WP 01.A	Word Problems	14-15, 25, 63, 72-73, 80-81, 84-85, 92, 108-109, 116-117, 145, 151-152, 154, 159, 165-173, 217, 231, 237, 268	34-37, 48-49, 60-61, 104-105, 149, 158-159, 219, 232-233, 252-253, 290-291, 306-307, 336-337, 341-357	14-15, 18-19, 33-39, 46-48, 51-52, 55-58, 92, 121-122, 124, 135-136, 162, 192, 198-201, 214, 264-265, 270-271, 278-279, 284-285	

MATHEMATICS PROGRAM OF STUDIES - TEXTBOOK CORRELATION

LEVEL 4

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Number Patterns				
M4 PA 01.A	1. Finds or follows the rule for a pattern for numbers learned at this level.	15, 49, 240	88-89	22-23, 99-101, 142-147	
M4 PA 02.A	2. Finds numbers that are in a pattern when given the rule for the pattern for numbers learned at this level.			148-171	
	Numeration 1. Whole Numbers				
M4 NU 01.A	a. Assigns place value through hundreds of millions; writes these numbers.	17, 213-215, 218	2-7, 16-19	8-11, 14-15	
M4 NU 01.B	b. Counts forwards from a given number (through 1,000,000,000); counts backwards from a given number (from 1,000,000,000).	16	8-9	12-13	
M4 NU 01.C	c. Identifies numbers that are between two different numbers; and numbers that are greater than or less than a given number (through 1,000,000,000).	15-16, 18, 217	16-19	12-15	
M4 NU 01.D	d. Uses correctly the symbols <, =, > between two numbers (through 1,000,000,000).	216	8-9	46-49	

Textbook Correlation
Level 4

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Numeration (Continued)				
M4 NU 01.E	e. Rounds given numbers to the nearest hundred or the the nearest thousand.	219-221	12-13	(rounding: 209-211)	
	2. Fractions and Mixed Numbers				
M4 NU 02.A	a. Finds equivalent proper fractions including those equivalent to the number 1.	178, 190-191	210-211	388-391	
M4 NU 02.B	b. Uses correctly the symbols $<$, $=$, $>$ between two proper fractions.	178, 180-181	208-209	390-391	
M4 NU 02.C	c. Relates mixed numbers to improper fractions; changes from one form to the other.	186-188	220-221	392-393	
	3. Decimals				
M4 NU 03.A	a. Assigns place value through hundredths; writes these numbers.	224-225, 227	236-239	(through thousandths: 336-344)	
M4 NU 03.B	b. Uses correctly the symbols $<$, $=$, $>$ between two decimals (through hundredths).	226	240-241	336-341, 345	
	Operations 1. Addition of Whole Numbers				
M4 OP 01.A	Adds two multidigit numbers; makes column additions.	19, 21, 29-35, 37-39, 41, 84	26-29, 38-39, 48-53	34-37, 41-43	

Textbook Correlation
Level 4

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Numeration (Continued)				
	2. Subtraction of Whole Numbers				
M4 OP 02.A	Subtracts two multidigit numbers.	20-21, 42-49, 52-55, 57	36-39, 54-63	38-43, 112-114	
	3. Addition and Subtraction of Whole Numbers				
M4 OP 03.A	Relates addition and subtraction through solving number sentences involving number families, (missing addends, missing minuends and subtrahends, inverse operations) for numbers learned at this level.	7, 43	32-33, 58	176-177	
	4. Multiplication of Whole Numbers				
M4 OP 04.A	a. Recognizes and applies the associative property of multiplication [(2 x 3) x 6 = 2 x (3 x 6)].	240, 265	92-93		
M4 OP 04.B	b. Multiplies given numbers by multiples of 10 (through thousands).	75, 250-252	98-99, 256-259	202-208	
M4 OP 04.C	c. Multiplies numbers having as many as three digits by numbers having as many as two digits.	235-237, 239, 241-244, 246-247, 253, 256-257, 262-264	100-113, 260-265, 272	214-223, 224-229, 233-238, 242-244	

Textbook Correlation
Level 4

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Operations (Continued) 5. Division of Whole Numbers				
M4 OP 05.A	a. Divides numbers having as many as four digits by 1-digit numbers.	117-124, 128-129, 273-279, 282-287, 289-293, 297	158-161, 165-166, 168-170, 178-197	110-114, 115-119, 272-283, 287-289	
M4 OP 05.B	b. Divides numbers having as many as three digits by 2-digit multiples of 10.	301-305	278-293	172	
	6. Multiplication and Division of Whole Numbers				
M4 OP 06.A	a. Recognizes that multiplication and division are inverse operations; checks division by multiplication.	120-124, 126	162-163	110-111, 145-147	
M4 OP 06.B	b. Relates multiplication and division through solving sentences involving number families (missing factors, missing divisors and dividends, inverse operations) for numbers learned at this level.	72, 120-122, 126, 130, 257	162-163, 166-169, 188-189	107-111, 176-177, 282-283, 310-311, 320-321	
	7. Addition, Subtraction, Multiplication, and Division of Whole Numbers				
M4 OP 07.A	Completes operations where the order of the operation is indicated by parentheses.	13, 83		120-122	

Textbook Correlation
Level 4

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Operations (Continued)				
	8. Averages				
M4 OP 08.A	Computes averages (whole number answers).	298-299		296-298	
	9. Addition of Fractions and Mixed Numbers				
M4 OP 09.A	a. Adds two proper fractions written in both horizontal and vertical forms.	182, 185, 192, 194	212-215, 222-223	396-399	
M4 OP 09.B	b. Explores addition of mixed numbers.	189	244	396-399	
	10. Subtraction of Fractions and Mixed Numbers				
M4 OP 10.A	a. Subtracts two proper fractions written in both horizontal and vertical forms.	183, 185, 193-194	216-219	396-399	
M4 OP 10.B	b. Explores subtraction of mixed numbers.	189	225	396-399	
	11. Multiplication of Fractions				
M4 OP 11.A	Finds fractional parts of whole numbers where the whole number is divisible by the denominator of the fraction.	196-197	228-229	382-383, 386-387	
	12. Addition of Decimals				
M4 OP 12.A	Adds two decimals (through hundredths).	201-202, 205	246-247	360-361	

Textbook Correlation
Level 4

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Note
	Operations (Continued)				
	13. Subtraction of Decimals				
M4 OP 13.A	Subtracts two decimals (through hundredths).	201-202, 205	246-247	360-361	
	Statistics and Graphs				
	1. Graphs and Tables				
M4 ST 01.A	Analyzes data from bar graphs, line graphs, and tables.	313, 315, 328-331	10-11, 324-335	32-33, 44-45, 314-317, 359	
	2. Ordered Pairs				
M4 ST 02.A	Names ordered pairs for given points (whole numbers).	160-161	336-337	138-141, 158-161, 175	
	Geometry				
	1. Lines, Angles, and Polygons				
M4 GE 01.A	a. Identifies quadrilaterals, pentagons, hexagons, and octagons.				
M4 GE 01.B	b. Recognizes intersecting, perpendicular, and parallel lines.	158-159		180-181	
M4 GE 01.C	c. Distinguishes between lines and line segments.		300		
	2. Congruency				
M4 GE 02.A	Recognizes congruent sides in plane geometric figures.	156-157, 166	304-305	185-187	

Textbook Correlation
Level 4

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Note
	Measurement				
	1. Metric				
M4 ME 01.A	a. Writes equivalent measures involving kilometers, meters, centimeters, decimeters, and millimeters.	93-96, 200, 311	128-132, 242-243	102-103, 354-359	
M4 ME 01.B	b. Writes equivalent measures for grams and kilograms.	312-314	138-139	376-377	
M4 ME 01.C	c. Writes equivalent measures involving cubic centimeters, milliliters, and liters.	102-103, 316-317		376-377, 380-381	
M4 ME 01.D	d. Chooses an appropriate unit of measure when measuring a given quantity.		136-137, 141, 147, 150, 153		
	2. Traditional				
M4 ME 02.A	a. Writes equivalent measures involving inches, feet, yards, and miles.	320-321	146-147	394-395	
M4 ME 02.B	b. Measures length to the nearest fraction of an inch (halves, fourths, and eighths).		230-231	394-395	
M4 ME 02.C	c. Writes equivalent measures involving ounces, pounds, and tons.	326	150-151		
M4 ME 02.D	d. Writes equivalent measures involving cups, pints, quarts, and gallons.	324-325	148-149		
M4 ME 02.E	e. Chooses an appropriate unit of measure when measuring a given quantity.		153		

Textbook Correlation
Level 4

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Measurement (Continued)				
	3. Perimeter				
M4 ME 03.A	Finds perimeters of regular and irregular polygons.	98, 101	306-307	29-30, 250-251	
	4. Area				
M4 ME 04.A	a. Finds areas of polygons by counting squares including half squares.				
M4 ME 04.B	b. Finds areas of squares by multiplying the length of a side by itself.		308-311	92-93, 250-251	
	5. Maps				
M4 ME 05.A	Reads simple maps or blueprints translating scales on maps to actual distances.	97	134-135, 314-315	32-33, 358	
	Money				
	1. Collection of Coins and Bills				
M4 MY 01.A	Recognizes bills ($1, $5, $10, $20); determines values of collection of coins and bills.				
	2. Money Amounts				
M4 MY 02.A	a. Compares fractions of a dollar with the number of cents they represent ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{10}$).			58-59	

Textbook Correlation
Level 4

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Money (Continued)				
M4 MY 02.B	b. Uses correctly the symbols < , =, > between two money amounts.			60-62	
	3. Addition				
M4 MY 03.A	Adds two or more money amounts (sums through $999.99).	58-59, 206	40-41, 64-65, 244-245	63-65, 360	
	4. Subtraction				
M4 MY 04.A	Subtracts two money amounts (minuends through $999.99).	58, 206	40-41, 64-65, 244-245	360	
	5. Addition and Subtraction				
M4 MY 05.A	Determines how much change will be given when paying for several items with a given collection of coins and bills.	60-61, 207			
	6. Multiplication				
M4 MY 06.A	Multiplies money amounts (through $999.99) by 1-digit numbers.	249	114-115, 244-245	229-231	
	7. Division				
M4 MY 07.A	Divides money amounts (through $999.99) by 1-digit numbers.	295	198-199, 244-245	288-289	

Textbook Correlation
Level 4

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Time				
	1. Hours, Minutes, and Seconds				
M4 TE 01.A	a. Knows the number of minutes in an hour and the number of seconds in a minute.	104, 106, 311	144-145	60	
M4 TE 01.B	b. Differentiates times by using A.M. and P.M.	107	142-143		
M4 TE 01.C	c. Reads digital clocks.	105	142-143		
M4 TE 01.D	d. Finds time before given times and after given times.	105, 110-111	142-143	391	
	2. Years, Months, Weeks, and Days				
M4 TE 02.A	a. Writes equivalent measures for hours, days, weeks, months, and years.	106, 109, 311	144-145	84-85, 239	
M4 TE 02.B	b. Writes dates with slashes; e.g., September 23, 1982 is 9/23/82.				
	Estimation				
M4 ES 01.A	1. Estimates indicated sums for numbers learned at this level.		68-69	36, 50-51	
M4 ES 02.A	2. Estimates indicated differences for numbers learned at this level.		68-69	50-51	
M4 ES 03.A	3. Estimates indicated products for numbers learned at this this level.	258-259	116-117, 266-267	212-213, 259	

Textbook Correlation
Level 4

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Estimation (Continued)				
M4 ES 04.A	4. Determines if an answer to a problem is reasonable.	223		284, 286, 292-293, 304-305, 314-315, 322, 323	
M4 WP 01.A	Word Problems	10, 14, 22-23, 36, 40, 50-51, 56, 60-61, 76-77, 85, 110-111, 127, 131, 137-147, 184, 195, 207, 222, 238, 245, 248, 254-255, 266-267, 280-281, 288, 294, 296, 300, 319, 322	34-35, 42-43, 66-67, 70-71, 90-91, 118-119, 147, 171-173, 183, 185, 189, 193, 200-201, 219, 227, 250-251, 270-271, 294-295, 314-315, 326-327, 341-357	16-17, 24-28, 30-31, 41-45, 52-55, 58-59, 63-68, 96-99, 104-105, 107-110, 112, 115-119, 124-125, 150-151, 154-155, 206-207, 210-211, 222-223, 230-231, 234-235, 239-241, 245, 248-251, 257, 260-261, 284-286, 288-289, 292-298, 300-301 304-305, 314-315, 320. 322-323, 362-364, 386-387, 390-391	

MATHEMATICS PROGRAM OF STUDIES - TEXTBOOK CORRELATION

LEVEL 5

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Number Patterns				
M5 PA 01.A	1. Finds or follows the rule for a pattern for numbers learned at this level.	11, 41-44	6-7, 117, 314-315	114-117, 122-123, 140-141 156, 166-169	
M5 PA 02.A	2. Makes addition and multiplication tables of even and odd integers.		104-105		
	Numeration				
	1. Fractions				
M5 NU 01.A	a. Uses correctly the symbols <, =, > between two given fractions.	202-204	150-151, 158-159		
M5 NU 01.B	b. Finds the missing numerator or denominator in equivalent fractions.	197-199, 208, 297	152-153	274-275	
M5 NU 01.C	c. Renames fractions in simplest form.	200	156-157	187	
	2. Decimals				
M5 NU 02.A	a. Assigns place value through thousandths; writes these numbers.	45-47	178-179	56-58	
M5 NU 02.B	b. Writes fractions with denominators 10, 100, and 1,000 as decimals.	215-217	172-175, 177		
M5 NU 02.C	c. Recognizes and writes equivalent decimals; e.g., 0.3 and 0.30.	221	176-177	56-58	

Textbook Correlation
Level 5

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Numeration (Continued)				
M5 NU 02.D	d. Uses correctly the symbols <, =, > between two decimals (through thousandths).	219-221	172-179	56-58	
	3. Decimals and Fractions				
M5 NU 03.A	Writes fractions as decimals (remainder, zero).		290-291	195-197	
	4. Ratios				
M5 NU 04.A	a. Interprets ratios; writes ratios as fractions.	212-213	320-321	212-215	
M5 NU 04.B	b. Makes equal ratios by finding a missing numerator or a missing denominator.	214	322-323		
M5 NU 04.C	c. Relates ratios to rates.		326-327	254-255	
	Operations				
	1. Multiplication of Whole Numbers				
M5 OP 01.A	a. Multiplies given numbers by multiples of 10 through ten thousands).	102-104	52-53, 54-57, 60-63	30-37	
M5 OP 01.B	b. Multiplies two multidigit numbers.	89, 91, 94-98, 105-106, 112-113	64-69	30-37	

Textbook Correlation
Level 5

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Operations (Continued)				
	2. Division of Whole Numbers				
M5 OP 02.A	a. Divides numbers having as many as five digits by 1-digit numbers.	21-22, 122-126, 128-133, 136-137, 142-145	78-79, 82-97	7-12, 42-47	
M5 OP 02.B	b. Divides numbers having as many as four digits by 2-digit numbers.	265-267, 269-275, 277-278, 281	122-141	220-225, 230-231, 244-248, 252-255, 258-259, 270	
	3. Addition of Mixed Numbers				
M5 OP 03.A	Adds a whole number and a mixed number; adds a proper fraction and a mixed number; adds two mixed numbers.	289, 294, 301	250-253	291-293, 388-389	
	4. Subtraction of Mixed Numbers				
M5 OP 04.A	Subtracts a whole number and a mixed number; subtracts a proper fraction and a mixed number; subtracts two mixed numbers.	291-293, 303	250-251, 254-257	291-293, 388-389	
	5. Multiplication of Fractions and Mixed Numbers				
M5 OP 05.A	a. Multiplies whole numbers by proper fractions; relates the word "of" with multiplication.	306-307	260-261	186-193	
M5 OP 05.B	b. Multiplies two proper fractions.	304-305	260-261	396-397	

Textbook Correlation
Level 3

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Note
	Operations (Continued)				
M5 OP 05.C	c. Multiplies a whole number and a mixed number; multiplies a proper fraction and a mixed number; multiplies two mixed numbers.	305	264-265	398-399	
	6. Addition of Decimals				
M5 OP 06.A	Adds two decimals (through thousandths).	308-309	180-181	59-61	
	7. Subtraction of Decimals				
M5 OP 07.A	Subtracts two decimals (through thousandths).	310-311	182-183	59-61	
	8. Multiplication of Decimals				
M5 OP 08.A	a. Multiplies decimals by 10, 100, and 1,000.		276-277	64-65, 202-204	
M5 OP 08.B	b. Multiplies whole numbers with as many as four digits by decimals (through thousandths).	315-316		70-72	
M5 OP 08.C	c. Multiplies two decimals (through thousandths).		272-275	418-421	
	9. Division of Decimals				
M5 OP 09.A	a. Divides decimals by 10, 100, and 1,000.		286-287	64-65, 202-204	

Textbook Correlation
Level 5

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Operations (Continued)				
M5 OP 09.B	b. Divides decimals by whole numbers having one or two digits.		280-283	107-111, 203-204	
	10. Ratios and Rates				
M5 OP 10.A	Uses ratios to find rates such as unit costs and speed.		292-293, 326-328	216-219, 254-255, 263-264	
	Equations				
M5 EQ 01.A	1. Solves equations such as: 41 + 372 = n; n = 41 + 372.			7-12, 60-61, 81	
M5 EQ 02.A	2. Solves equations such as: 763 - 27 = n; n = 763 - 27.		31	7-12, 60-61, 81	
M5 EQ 03.A	3. Solves equations such as: 532 x 7 = n; n = 532 x 7.		78-79	7-12, 60-61, 81	
M5 EQ 04.A	4. Solves equations such as: 136 ÷ 8 = n; n = 136 ÷ 8.		78-79	7-12, 60-61, 81	
	Statistics and Graphs				
	1. Graphs				
M5 ST 01.A	Constructs bar and line graphs from given sets of data.	(bar: 324-325)	304-305, 308-309		
	2. Probability				
M5 ST 02.A	Interprets probabilities; writes probabilities as fractions.	330-331	166-167	429-430	

Textbook Correlation
Level 5

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Geometry				
	1. Lines, Angles, and Polygons				
M5 GE 01.A	a. Identifies right, acute, obtuse, and straight angles.	(not straight angles: 172-173)	(not straight angles: 224-225)	312-318	
M5 GE 01.B	b. Labels the endpoints of a line segment.		220-221		
M5 GE 01.C	c. Labels a line naming two points on the line; labels intersecting lines including the point of intersection.	174-175	220-221	351	
M5 GE 01.D	d. Labels an angle including the rays and vertex.	171, 174	222-225	322-323	
M5 GE 01.E	e. Relates quadrilaterals, parallelograms, rectangles, and squares.	177-178	226-227	354-355	
	2. Circles				
M5 GE 02.A	Labels the center point of a circle; labels diameters, radii, and chords.	179-180	232-233		
	3. Similarity				
M5 GE 03.A	Identifies similar triangles, noting the proportional sides.	183		335-337	

Textbook Correlation
Level 5

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Geometry (Continued)				
	4. Solids				
M5 GE 04.A	Identifies cubes; identifies rectangular, triangular, and hexagonal prisms; identifies triangular, rectangular, and square pyramids.	186-187	242-243		
	Measurement				
	1. Metric				
M5 ME 01.A	a. Uses correctly the metric prefixes: milli-, centi-; deci-, kilo-; describes their decimal relationships.	229-232, 243-246	190-191	66-67	
M5 ME 01.B	b. Converts among metric measures for length, weight, and volume.	229-232, 243-246	190-191, 278-279, 288-289	66-67	
	2. Traditional				
M5 ME 02.A	a. Measures lengths to fractions of an inch.		208-209		
M5 ME 02.B	b. Converts among traditional measures for length, weight, and volume.	248-254	210-212	400-401	
	3. Area				
M5 ME 03.A	a. Uses the formula $A = lw$ to find areas of rectangles.	107, 237-238, 250	236		
M5 ME 03.B	b. Uses the formula $A = \frac{1}{2} bh$ to find the areas of right triangles.		237	364-367	

Textbook Correlation
Level 5

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Measurement (Continued)				
	4. Volume				
M5 ME 04.A	Finds volumes of rectangular prisms by multiplying length times width times height.	239-241, 251	238-241	266-267	
	5. Temperature				
M5 ME 05.A	Measures temperatures in degrees Celsius and in degrees Fahrenheit, including degrees below zero.	247, 255	202-203, 213		
	6. Angles				
M5 ME 06.A	Measures angles in degrees (with protractors).		222-224	318-323	
	7. Maps				
M5 ME 07.A	Adds and subtracts distances on maps.			27-28	
	Money				
	1. Collections of Coins and Bills				
M5 MY 01.A	Determines values of collections of coins and bills (including $100 bills).		17	52-55	

Textbook Correlation
Level 5

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Not
	Money (Continued)				
	2. Multiplication				
M5 MY 02.A	Multiplies money amounts by 2-digit numbers.	99, 317	58-59, 65, 67		
	3. Division				
M5 MY 03.A	Divides money amounts by 2-digit numbers.	138, 280	97, 142-143, 281		
	4. Costs				
M5 MY 04.A	c. Determines the cost of several different purchases, including identical items.		43	134-135, 229	
M5 MY 04.B	b. Tells how much change will be given when paying for for several different items (including identical items) with a given collection of coins and bills.		16-17, 43-44		
	Time				
M5 TE 01.A	Knows the time zones within the United States; describes changes in time from one zone to another.	258-259	206		

87

Textbook Correlation
Level 5

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Estimation				
	1. Operations				
M5 ES 01.A	a. Estimates indicated sums for numbers learned at this level.	63, 313	40-41	20-23, 74-75, 87-89	
M5 ES 01.B	b. Estimates indicated differences for numbers learned at this level.	76, 313	40-41	38-31, 74-75, 87-89	
M5 ES 01.C	c. Estimates indicated products for numbers learned at this level.	111		38-41, 87-89	
M5 ES 01.D	d. Estimates indicated quotients for numbers learned at this level.		70-71	51-52, 220-225	
	2. Money				
M5 ES 02.A	a. Estimates if given amounts of money will buy one or more items.			60, 85	
M5 ES 02.B	b. Estimates costs to the nearest dollar.		16		
M5 ES 02.C	c. Estimates the sum of two money amounts.		43		
M5 ES 02.D	d. Estimates the difference of two money amounts.		43		

Textbook Correlation
Level 5

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
M5 WP 01.A	Word Problems	8, 14, 20, 25, 59, 64-65, 79, 82-83, 93, 100, 114-115, 121, 127, 134-135, 139, 151-165, 211, 268, 276, 279, 296, 314	45, 72-73, 80-81, 184-185, 200-201, 258-259, 284-285, 340-341, 346-361	13-15, 27-29, 38-45, 48-51, 62-63, 68-69, 73-75, 82-83, 120-121, 128-129, 144-145, 162-165, 198-199, 205-207, 226-227, 249-253, 260-261, 268-269, 272-273, 278-279, 284-285, 294-295, 332-333, 348-349, 358-359, 368-369, 371-373, 395, 400-402, 404-405, 412-413, 424-427, 436-437	

MATHEMATICS PROGRAM OF STUDIES - TEXTBOOK CORRELATION

LEVEL 6

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Number Patterns				
M6 PA 01.A	Finds or follows the rule for a pattern for numbers learned at this level.	51, 183, 193	88-89, 113	266-267	
	Numeration				
	1. Whole Numbers				
M6 NU 01.A	a. Finds the least common multiple of two given numbers.	194	90-91	232-233	
M6 NU 01.B	b. Uses divisibility rules for 2, 3, 5, 9, and 10.	184-185	98-101	185-189	
M6 NU 01.C	c. Finds the factors of given numbers.	186, 192	92-93, 96-97	193	
M6 NU 01.D	d. Finds the greatest common factor of two given numbers.	187-188	94-95	220-222	
M6 NU 01.E	e. Identifies prime and composite numbers.	189-190	96-97	196-197	
M6 NU 01.F	f. Finds the prime factorization of given numbers.	191	96-97	196-197	
	2. Exponents				
M6 NU 02.A	a. Writes powers of 10 in exponential form (whole numbers).	64-65	6-7	120-122	
M6 NU 02.B	b. Writes numbers using powers of 10 and exponents (expanded notation).		6-7	123-125	
M6 NU 02.C	c. Writes numbers corresponding to given expanded notation.		6-7	123-125	

Textbook Correlation
Level 6

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Numeration (Continued)				
M6 NU 02.D	d. Finds cubes of given numbers (less than 10).	64-65			
	3. Integers				
M6 NU 03.A	a. Illustrates the integers; writes negative integers using the symbol (-) or ¯; writes positive integers using the symbol (+) or ⁺.	324	324-327	72-73	
M6 NU 03.B	b. Orders two given integers.	324	324-327		
	4. Decimals				
M6 NU 04.A	a. Assigns place value through hundred thousandths; writes these numbers.	43-44, 227-228	(through thousandths: 134-137)	8-9	
M6 NU 04.B	b. Uses correctly the symbols $<$, $=$, $>$ between two decimals (through hundred thousandths).	148-149, 229	(through thousands: 130-137)	8-9	
M6 NU 04.C	c. Rounds a given decimal to the nearest whole number, tenth, hundredth, or thousandth.	150-151	172-173	(whole numbers: 70-71)	
	5. Fractions and Decimals				
M6 NU 05.A	Writes common fractions as decimals, including repeating decimals.	146-147, 254-255	170-171	214-215, 248-253	

Textbook Correlation
Level 6

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Numeration (Continued)				
	6. Percents				
M6 NU 06.A	a. Writes ratios in hundredths as percents.	265	244-245	150-153	
M6 NU 06.B	b. Writes given percents as fractions and given fractions as percents.	266-269	246-247, 249		
	Operations				
	1. Division of Whole Numbers				
M6 OP 01.A	Divides multidigit numbers by 2- and 3-digit numbers.	77-81, 83-84, 87-88, 90-92, 94-99	62-69, 72, 78-83, 303-305	46-55	
	2. Addition of Integers				
M6 OP 02.A	Adds two integers; recognizes that addition of an integer and the negative of that integer is the number 0.	326	328-329	72-75	
	3. Subtraction of Integers				
M6 OP 03.A	Subtracts two integers.		330-331	72-75	
	4. Division of Fractions and Mixed Numbers				
M6 OP 04.A	a. Writes the multiplicative inverse (reciprocal) of a fraction, a nonzero whole number, or a mixed number.	219	310-311	263-265, 268-269	

Textbook Correlation
Level 6

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Operations (Continued)				
M6 OP 04.B	b. Divides two proper fractions.	221	312-313	268-270	
M6 OP 04.C	c. Divides whole numbers and mixed numbers by fractions and by mixed numbers; divides mixed numbers by whole numbers.	220-221	312-315	268-270	
	5. Addition of Decimals				
M6 OP 05.A	Adds two decimals (through hundred thousandths).	230-231, 234	(through thousandths: 140-141)	90-92	
	6. Subtraction of Decimals				
M6 OP 06.A	Subtracts two decimals (through hundred thousandths).	232-233	(through thousandths: 142-143)	90-92	
	7. Division of Decimals				
M6 OP 07.A	Divides decimals by decimals (through hundredths).	248-253	162-167, 172-173	110-114	
	8. Percents of Numbers				
M6 OP 08.A	a. Finds percents of whole numbers.	270-271	250-251	150-153, 156-158	
M6 OP 08.B	b. Determines sales taxes and discounts (whole number prices).		144-145, 250	154-158	

Textbook Correlation
Level 6

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Equations				
M6 EQ 01.A	1. Solves equations such as: n + 12 = 25.			13-15, 18-19, 22, 67-68, 325, 327	
M6 EQ 02.A	2. Solves equations such as: n - 42 = 25.			13-15, 18-19, 22, 67-68, 325, 327	
M6 EQ 03.A	3. Solves equations such as: n x 7 = 84.	10	58-59, 311	16-19, 22, 67-68, 325, 327	
M6 EQ 04.A	4. Solves equations such as: $\frac{n}{6} = 12$.		58-59	16-19, 22, 67-68, 325, 327	
	Statistics and Graphs				
	1. Graphs				
M6 ST 01.A	Reads and interprets circle graphs.	323		418-421	
	2. Probability				
M6 ST 02.A	a. Understands the 0 through 1 range of probabilities and what 0 and 1 probabilities of events mean.	328-331	290-293, 318-319	238-245	
M6 ST 02.B	b. Writes probabilities as decimals and percents.		294-295	242-245	
M6 ST 02.C	c. Counts arrangements using a tree diagram.	122-123	52-53, 318-319		

Textbook Correlation
Level 6

MATH SKILLS CODE	PMS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Statistics and Graphs (Continued)				
	3. Sets of Data				
M6 ST 03.A	a. Finds the mean (average) of a set of whole numbers including decimal or fractional answers.	85	64-65, 70-71, 286-287	178-181	
M6 ST 03.B	b. Finds the median of a set of whole numbers.		288-289		
M6 ST 03.C	c. Finds the mode of a set of whole numbers.		288-289		
	4. Ordered Pairs				
M6 ST 04.A	a. Graphs ordered pairs of integers; names ordered pairs for given points (integers).	321	224-225, 334-335	290-293, 304-307	
M6 ST 04.B	b. Graphs a linear function (a rule for a pattern which makes a straight line.)		336-337	290-297, 300-303, 308-310, 314-315, 318-321, 322-324, 332-333	
	Geometry				
	1. Angles and Polygons				
M6 GE 01.A	a. Identifies vertical angles; recognizes that vertical angles are equal.			402-403	

Textbook Correlation
Level 6

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Geometry (Continued)				
M6 GE 01.B	b. Recognizes likenesses and differences among quadrilaterals, trapezoids, and parallelograms.	167	(not trapezoids: 214-215)	367	
M6 GE 01.C	c. Identifies rectangles, squares, and rhombuses as special kinds of parallelograms.	168	214-215	374-376	
M6 GE 01.D	d. Identifies isoceles, equilateral, and scalene triangles.	165-166, 169	214-215	374-376	
	2. Circles				
M6 GE 02.A	Constructs circles with a compass.			412-413	
	3. Congruency				
M6 GE 03.A	Draws or copies congruent angles.		210-211	414-415	
	Measurement 1. Traditional				
M6 ME 01.A	a. Adds two given measurements including hours and minutes.		200-201		
M6 ME 01.B	b. Subtracts two measurements including hours and minutes.		200-201		

Textbook Correlation
Level 6

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Measurement (Continued)				
	2. Area (Polygons and Rectangular Solids)				
M6 ME 02.A	a. Uses the formula ($A = s^2$) to find areas of squares.	290-291	258-259		
M6 ME 02.B	b. Uses the formula A = bh to find areas of parallelograms.		260-261	368-369	
M6 ME 02.C	c. Uses the formula A = ½bh to find areas of triangles.	292	260-261	364-365, 370-371	
M6 ME 02.D	d. Finds surface areas of rectangular solids by adding areas of the individual parts.	296		358-360, 363	
	3. Area and Circumference (Circles)				
M6 ME 03.A	a. Understands the use of 3.14 as an approximation of π .	289	257, 263	338-340	
M6 ME 03.B	b. Uses the formula $C = 2\pi r$ or $C = \pi d$ to find circumferences of circles.	289	256-257	338-340	
M6 ME 03.C	c. Uses the formula $A = \pi r^2$ to find areas of circles.	292	262-263		
	4. Volume				
M6 ME 04.A	Uses the formula V = lwh to find volumes of rectangular solids.	294-295	264-269	361-362	

Textbook Correlation
Level 6

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Measurement (Continued) 5. Temperature				
M6 ME 05.A	a. Compares temperatures and temperature ranges in degrees Celsius, including temperatures below 0° C.	301	190-191		
M6 ME 05.B	b. Compares temperatures and temperature ranges in degrees Fahrenheit, including temperatures below 0° F.	309	199		
	6. Scale Drawings				
M6 ME 06.A	Finds dimensions of objects using scale drawings and scale ratios.	286	238-239		
	Money				
M6 MY 01.A	Makes change by counting upwards from the cost (of an item or several items) to the amount given.				
	Time				
M6 TE 01.A	Reads airline, bus, or train schedules.	311	193	176-177	
	Estimation 1. Operations				
M6 ES 01.A	a. Estimates indicated sums for numbers learned at this level.	119	22-23, 138-139	55, 65	

Textbook Correlation
Level 6

MATH SKILLS CODE	POS Objectives	HBJ Mathematics	McGraw-Hill Mathematics	Real Math	Resources/Notes
	Estimation (Continued)				
M6 ES 01.B	b. Estimates indicated differences for numbers learned at this level.	119	22-23, 138-139	45, 65	
M6 ES 01.C	c. Estimates indicated products for numbers learned at this level.	(whole numbers: 69, 119)	44-45, 48-49, 154-155	45, 65, 103, 152, 317	
M6 ES 01.D	d. Estimates indicated quotients for numbers learned at this level.	119		45, 65, 103, 317	
	2. Measurement				
M6 ES 02.A	a. Estimates fractional quantities (denominators 10 or less).			10-12, 384-385	
M6 ES 02.B	b. Estimates the number of square units needed to make a given area.			192	
M6 WP 01.A	Word Problems	15, 22-25, 42, 56-57, 66-67, 82, 86, 89, 100-101, 107-123, 145, 213, 236, 244-245, 247, 264, 272-273, 275, 293, 304-305	24-25, 36-37, 50-51, 60-61, 148-149, 202-203, 270-271, 316-317, 332-333, 342-357	20-23, 32-33, 36-37, 42-43, 46-49, 58-63, 70-71, 76-77, 93-95, 108, 114-116, 118-119, 124-125, 132, 159-161, 166-167, 174, 180-183, 190-191, 194-195, 198-199, 216-217, 224-225, 236-237, 250-251, 258-263, 304-305, 312-313, 326-327, 358-359, 376-377, 394-395	

93

Instructional Coding System:
Supplementary Materials
for
Mathematics Program of Studies

Assigned Skill Code	Supplementary Materials		Location
	Title	Page Number	
M2 NU 01.C	Work with Numbers M Cambridge Work A Text (Modern Curriculum Press)	101, 102, 103	School Supply Room